**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**
**REGION III**
**1650 Arch Street**
**Philadelphia, Pennsylvania 19103-2029**

JAN 26 2015

Lieutenant Colonel Luis A. Ortiz
Commander
Radford Army Ammunition Plant
State Route 114
Radford, VA 24141

Mr. Michael Miano
Alliant Techsystems Operations
RFAAP
Caller Service 6, Rt. 114
Radford, VA 24141

Re: Radford Army Ammunition Plant (RAAP or the Facility)
Invitation to Settlement

Dear Lieutenant Colonel Ortiz and Mr. Miano:

EPA conducted multi-media inspections of the U.S. Army's RAAP on May 16 – 20, 2011, and February 4 – 13, 2014. At the time of the first EPA inspection in May 2011, the principal contractor for the Facility was Alliant Techsystems (ATK). The purpose of this letter is to outline potential compliance issues for activities under ATK operation; these activities have given rise to concerns under the Resource Conservation and Recovery Act (RCRA), the Clean Air Act (CAA), the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), and the Clean Water Act (CWA).

EPA could proceed with the filing of an administrative complaint with respect to some of these allegations, but would prefer to reach a negotiated resolution. As a result, EPA is issuing this invitation to commence settlement discussions with EPA. The process contemplated by EPA consists of two steps. The first step is an exchange of information regarding the alleged violations and the areas of concern which are identified in an enclosure to this letter. If, as a result of the information exchange, EPA determines that an administrative order for the performance of corrective actions is necessary, then EPA will proceed accordingly as a second step. Assurance that the Facility is currently in compliance with the relevant environmental laws and regulations is EPA's highest priority in this matter. Nevertheless, the second step will also require the negotiation of an appropriate penalty for any violations identified and the execution of a Consent Agreement and Final Order (CAFO), the EPA settlement document used to resolve administrative matters. EPA has discussed the matters outlined in this letter with representatives

of the Virginia Department of Environmental Quality (VADEQ) and intends to keep VADEQ informed to the greatest extent possible of our negotiations, although VADEQ cannot be a party to the CAFO. Each step is further outlined below.

## I. Information Exchange Regarding Alleged Violations

EPA has outlined in an enclosure to this letter those matters which it considers to be potential violations of the applicable environmental regulations. In addition, EPA has identified areas of concern with respect to the different environmental media. Those items identified as areas of concern are items for which EPA is not proposing the assessment of a penalty at this time because EPA needs additional information from the Facility. Nevertheless, these items are critical as they may require the performance of corrective actions or may affect continued environmental compliance by the Facility.

EPA acknowledges that the RAAP has already provided some information to EPA. However, if the Facility has additional information which it considers relevant to the consideration of these matters, then it should submit such information to EPA as promptly as possible. Please send documents to the attention of Ms. Tia Chambers (EPA) to the following address:

Tia Chambers (3EC10)
Office of Enforcement, Compliance and Environmental Justice
U.S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103-2029
Telephone: (215) 814-2164
E-mail: chambers.tia@epa.gov

## II. Settlement Process

As indicated earlier, EPA is concerned about on-going compliance by the Facility with environmental laws and regulations and is considering whether the issuance of administrative orders is necessary. In addition, EPA has determined that the issuance of an enforcement action to seek assessment of a civil penalty concerning the aforesaid alleged violations is the appropriate enforcement response. Prior to taking any of these steps, however, EPA is providing the Facility an opportunity to confer.

If this matter is to be resolved via a settlement, EPA would like to conclude negotiations and begin the signature process for any agreed upon corrective action orders and the CAFO within sixty (60) days of receipt of this letter. EPA welcomes any face to face meetings with representatives of the Facility at any time. Please contact Ms. Tia Chambers, at 215-814-2164, to schedule a meeting. In the alternative, your counsel can contact Daniel Isales, Assistant Regional Counsel, at 410-305-3016. Please be advised once again, however, if this matter is not resolved within sixty (60) days of receipt of this letter, EPA may proceed with an enforcement action. This letter does not impair EPA's ability to take an enforcement action against any person, including, but not limited to the Facility, concerning any of the matters addressed herein.

Thank you for your cooperation in this matter.

Sincerely,

Samantha P. Beers, Director
Office of Enforcement, Compliance and
Environmental Justice

Enclosure

cc: Sally Dalzell (FFEO)
Jeff Hurts (VADEQ)
John Brandt (VADEQ)

## Enclosure

## Alleged Environmental Violations and Areas of Concern

## RCRA Hazardous Waste Management (RCRA, Subtitle C) Alleged Violations

Virginia initially received final authorization for its hazardous waste regulations, the Virginia Hazardous Waste Management Regulations ("VaHWMR"), 9 VAC 20-60-12 *et seq.*, on December 4, 1984, effective December 18, 1984 (49 Fed. Reg. 47391). EPA reauthorized Virginia's regulatory program on June 14, 1993, effective August 13, 1993 (58 Fed. Reg. 32855); on July 31, 2000, effective September 29, 2000 (65 Fed. Reg. 46606), on June 20, 2003, effective June 20, 2003 (68 Fed. Reg. 36925), on May 10, 2006, effective July 10, 2006 (71 Fed. Reg. 27204), and on July 30, 2008, effective July 30, 2008 (73 Fed. Reg. 44168). For each allegation listed, the appropriate federally authorized provision of the VAHWMR is referenced below.

At the time of the EPA inspection, the Facility was a Large Quantity Generator of hazardous waste and, as such, had less-than 90 day storage areas and satellite accumulation areas. With respect to universal waste, the Facility was a Small Quantity Generator of universal waste. Moreover, the Facility has a Treatment, Storage and Disposal (TSD) permit to operate a hazardous waste propellants open burning ground and two hazardous waste incinerators.

Please note that by virtue of having allegedly violated the hazardous waste generator requirements set forth at 9 VAC 20-60-262, the Facility also violated 9 VAC 20-60-270, which incorporates by reference 40 C.F.R. § 270.1(b), by operating a hazardous waste storage facility without a permit or interim status.

1. For the items listed below, the Facility is alleged to have violated the requirements pertaining to the management of waste at satellite accumulation areas, which is governed by 9 VAC 20-60-262, which incorporates by reference the requirements of 40 C.F.R. § 262.34(c)(1). All of the items listed below took placed during the first EPA Inspection.
    a. In the Building 9468, two 3-gallon buckets containing waste "slum" samples (generally speaking, a combination of nitroglycerin, triacetin, acetone, and filter paper) were not marked with the words "hazardous waste."
    b. In Building 9304, waste was transferred from two unlabeled 20-gallon tubs to "waste tubs" labeled "Hazardous Waste" located in the adjacent room. These "waste tubs" are not located at or near the point of generation.
    c. In Building 3524, there was a 20-gallon drum containing floor sweeps which was not closed at the time of the EPA Inspection and waste was not being added or removed from the container at the time.
    d. In Building 3524, there was a 20-gallon drum containing floor sweepings from spilled material containing 2-nitrodiphenylamine which was not at or near the point of waste generation. In addition, the drum was not properly closed. Moreover, there were other drums within Building 3524, which were not properly closed,

including a 20-gallon fiber drum located in Bay #1 and two 20-gallon fiber drums containing lead located in Bay #3.

e. In the Rocket Area, there was a 55-gallon drum containing empty aerosol cans which had been obtained from areas which were not at or near that drum.
f. In Building 244, there was a 55-gallon drum containing waste generated from gas tank cleanouts. The drum was located outside the garage, which was not at or near the point of generation, and was not properly closed.
g. In Building 4912-5, two propellant shaving collection containers labeled as "Waste Explosives" were open and waste was not being added or removed at the time.
h. In the Slurry House, there was a container marked with the words "hazardous waste" storing waste propellant lumps (these are lumps of propellant which are formed during the production of the propellant and removed by screens). The container was open, but no waste was being added or removed at the time.

2. This allegation encompasses a number of different requirements regarding the management of universal waste, specifically regarding the management of universal waste lamps. The Facility is alleged to have violated 9 VAC 20-60-273, which incorporates by reference the requirements of 40 C.F.R. §§ 273.13(d), 273.14(e), and 273.15.
    - 40 C.F.R. § 273.13 (d) (Waste Management) – Lamps must be managed in a way that prevents releases to the environment and any broken lamp must be immediately cleaned up and placed in a container.
    - 40 C.F.R. §273.14 (e) (Labeling/Marking) – Lamps must be clearly labeled or marked.
    - 40 C.F.R. § 273.15 (Accumulation Time Limits) – There must be some means of demonstrating when universal waste became a waste or was received.

    a. In Building 450, there was an open box containing 13 waste lamps, with no means of indicating the length of time that the waste lamps had been accumulated.
    b. In Building A-1034, there was an open box and open drum containing waste lamps. There were no means being utilized of demonstrating the length of time that the waste lamps had been accumulating.
    c. In Building A-1034, there were waste lamps on the ground. There were pieces of broken glass from the waste lamps located outside the building.
3. The Facility is alleged to have violated the Land Disposal Restriction (LDR) regulations set forth at 40 C.F.R. Part 268, which is incorporated by reference at 9 VAC 20-60-268.
    a. The Facility failed to maintain the corresponding LDR form for the Manifest No. 006748108, dated 10/26/10, in violation of 40 C.F.R. § 268.7(a)(8) which states that the generators must retain on-site copies of all notification, certifications, waste analysis data, and other document for three years.
    b. The Facility used an incorrect waste code for dinitrotoulenes in the LDR form dated 3/10/10, in violation of 40 C.F.R. § 268.7(a)(2)(ii), which states that the generator must sent a onetime notification to each facility receiving the waste. This notice must include the EPA hazardous waste number when a generator chooses not make the determination of whether the waste must be treated.

**RCRA Hazardous Waste Management (RCRA, Subtitle C) Areas of Concern**

1. EPA is concerned that there may be additional areas of the Facility, currently not covered by the existing TSD permit, which should permitted because waste is being accumulated for a time period greater than that allowed for generators or because waste is being treated:
    a. In the Scrap Burn Area, the Facility may have stored demolition debris from the nitrocellulose manufacturing facility B-line for greater than ninety days.
    b. EPA is concerned that the Facility is using a decontamination oven (Building 4903) for treatment of hazardous waste even though it is not currently covered by the TSD permit.
    c. EPA is concerned that in the lead burning shop, the Facility stored lead containing scrap for greater than one year.
    d. EPA is concerned that the hill tank used to store wastewater generated by the nitrocellulose plant has never been emptied or cleaned out.
2. EPA is concerned with the roof and supporting structure of Building 440, which houses an incinerator. EPA was informed that the wooden roof and supporting structure for Building 441 which also houses an incinerator burned down. Building 440 still has a wooden roof and supporting structure for its incinerator and EPA is concerned whether the Facility has complied with 40 C.F.R. § 264.31 which states that facilities must be designed, constructed, maintained, and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, and surface water which could threaten human health and the environment.
3. Part III.1. B.3. of the Facility's TSD permit (Permit No. VA1210020730) states that the integrity of tank and process area containment systems shall be maintained. According to the permit, cracks, gaps, loss of integrity, deterioration, corrosion, or erosion of pads, berms, curbs, sumps, construction joints, and coatings of the tank system area shall be repaired. Nevertheless, at the time of the first EPA Inspection the concrete pad within the Hazardous Waste Incinerator Building showed signs of deterioration.
4. In the Hazardous Incinerator Complex, there were ash collection containers and baghouse ash containers with a capacity to contain greater than 55 gallons of hazardous waste. EPA is concerned that the use of these containers may lead to storage of greater than 55 gallons of hazardous waste at a satellite accumulation area.

**RCRA Underground Storage Tanks (RCRA, Subtitle I) Alleged Violations**

On September 28, 1998 (effective October 28, 1998) (63 Fed. Reg. 51528), pursuant to Section 9004 of RCRA, 42 U.S.C. § 6991c, and 40 C.F.R. Part 281, Subpart A, the Commonwealth of Virginia was granted final authorization by EPA to administer a state underground storage tank management program *in lieu* of the Federal underground storage tank management program established under Subtitle I of RCRA, 42 U.S.C. §§ 6991-6991i. The provisions of the Commonwealth of Virginia underground storage tank management program, through this final authorization, have become requirements of Subtitle I of RCRA and are, accordingly, enforceable by EPA pursuant to Section 9006 of RCRA, 42 U.S.C. § 6991e. The provisions of the Commonwealth of Virginia's authorized underground storage tank

program are cited as Underground Storage Tanks (USTs): Technical Standards and Corrective Action Requirements ("VA UST Regulations"), 9 VAC 25-580-10 *et seq.* For each violations listed, the federally authorized VA UST Regulations are referenced below, as well as citations to the corresponding RCRA regulations.

The Facility is alleged to have violated 9 VAC 25-580-140 (40 C.F.R. § 280.41), which requires release detection for petroleum containing USTs. The Facility did not conduct leak detection for USTs 7220-1, 7220-2, and 7220-3 for the month of December 2010.

**RCRA Underground Storage Tanks (RCRA, Subtitle I) Area of Concern**

EPA is concerned with respect to the Facility's compliance with 9 VAC 25-580-190 (40 C.F.R. § 280.50) which requires an owner and/or operator to report to the implementing agency if the monitoring results indicate a release. According to the monitoring results in September 2010, UST 7220-3 indicated a leak rate of greater 0.2 gallons/hour and there is no evidence that the Facility reported this to the VADEQ.

**CWA Spill Prevention Control and Countermeasure (SPCC) Plan Area of Concern**

At the time of the first EPA Inspection, it appeared that there were several areas of the SPCC Plan which needed updating. EPA is aware that in 2013 the Facility updated its SPCC Plan; however, that was done by current contractor. EPA therefore requests that the Facility indicate whether there were any updates to the SPCC Plan prior to the 2013 revision.

**CWA National Pollutant Discharge Elimination System (NPDES) Permit Areas of Concern**

At the time of the first EPA Inspection, there were several areas of concern noted, which are outlined below.

1. Permit No. VA0000248 Part I states that the plan should include measures that confines the actual or potential fluid leaks in the vehicle and equipment storage areas. However, at the time of the first EPA Inspection there were oily pools of stormwater located at the heavy equipment storage lot.
2. Permit No. VA0000248 states that the facility shall implement measures to prevent or minimize contamination of surface runoff from oil bearing equipment in switch yard. However, at the time of the EPA Inspection there were stains in the ground in the vicinity of four transformers.
3. Permit No. VA0000248 states that the facility is to implement measures to reduce pollutants in storm water discharges from industrial materials and activities that are exposed to storm water.
   a. At the time of the first EPA Inspection there was coal sediment outside the coal pile storage pads. The sediment was observed near Outfall #004.
   b. At the time of the first EPA Inspection lead was being stored outside the lead burning shop, the demolition; water coolers, refrigeration, and window units stored outside in the Hazard test area. In addition, there was debris from the nitrocellulose

manufacturing facility B-line in the scrap burn area and scrap and metal parts near the decontamination oven.

4. Permit No. VA0000248, Part II, Section Q, states that the facility at all times must properly operate and maintain all facilities and systems of treatment and control which are installed or used by the facility to achieve compliance with the conditions of this permit. However, during the first EPA Inspection there was information that during rain events acidic wastewater would enter the sanitary sewer collection system because both the sanitary lines and the acid waste water lines were cracked.

**CAA Title V Permit and Stationary Refrigeration Equipment Regulations Alleged Violations**

1. At the time of the first EPA Inspection, air emissions from the Facility were regulated pursuant to a Title V permit (Permit No. VA-20656) issued to both ATK and the Army. A comprehensive review of documentation revealed the following areas of non-compliance set forth below; the documentation gathered during the EPA Inspections forms basis for each of these allegations, but these can be discussed in further detail once the parties begin settlement negotiations:

    a. Exceedances of the visible emissions restrictions regarding boiler stacks;
    b. Exceedances of the visible emissions restrictions regarding other equipment at the Facility;
    c. Failure to maintain the tray scrubber with devices to continuously measure the scrubber liquid flow rate and the differential pressure drop across the scrubber;
    d. Failure to maintain records of all emission data and operating parameters necessary to demonstrate compliance with the permit;
    e. Failure to properly maintain the piccolo scrubber and associated recordkeeping;
    f. Failure to properly calculate the hourly rolling average carbon monoxide level;
    g. Failure to maintain minimum combustion chamber temperature for Incinerators 440 and 441;
    h. Failure to comply with the maximum flow rate of 50fps with respect to Incinerator 440;
    i. Failure to comply with the maximum afterburner combustion chamber temperature for Incinerators 440 and 441;
    j. Failure to comply with the maximum baghouse inlet temperature for Incinerators 440 and 441;
    k. Failure to comply with the minimum scrubber system liquid flow rate of 70gph for Incinerators 440 and 441;
    l. Failure to maintain all electronic data for Incinerators 440 and 441;
    m. Failure to properly maintain all equipment in a manner consistent with good air pollution control practice of minimizing emissions.

2. A review of the Facility's records pertaining to compliance with the 40 C.F.R. Part 82 regulations for stationary refrigeration equipment shows that in certain instances records were not kept, leak rate calculations were not performed, and initial and follow-up leak verifications were not done. The Facility's Title V permit also requires compliance with the 40 C.F.R. Part 82 regulations.

**CAA Section 112r Area of Concern**

EPA reviewed the Facility's Semi-Annual Monitoring Report, including Plant-wide Summary of Deviations and VADEQ form *Failure to Monitor, Keep Records or Report*, for the period January 1 through June 30, 2010. This document indicated that a compliance audit had been conducted with respect to the requirements of 40 C.F.R. Part 68 and found that various records referenced by or incorporated in the Facility's Risk Management Plan were outdated or not specific enough, which could lead to non-compliance with the following provisions of the 40 C.F.R. Part 68 requirements: 68.65, 68.67, 68.69, 68.71, 68.73, 68.79, 68.81, 68.83, 68.87. EPA would like to discuss with the Facility, the current state of the RMP and whether documents have been maintained up to date.

**CERCLA Alleged Violations**

1. 40 C.F.R. § 302.6 (a) states that any person in charge of a vessel or an offshore or an onshore facility shall, as soon as he or she has knowledge of any release of a hazardous substance from such vessel of facility in a quantity equal to or exceeding the reportable quantity determined by this part in any 24-hour period, immediately notify National Response Center (NRC). For the two incidents noted below, the Facility failed to immediately notify the NRC.
    a. According to incident report #932314, the Facility reported a release of 10 lbs. of nitroglycerin that occurred at 15:00 on 2/25/10 to the NRC at 16:22 on 2/25/10.
    b. According to incident report #99612, the Facility reported a release of diethyl ether that occurred at 5:00 on 11/22/11 to the NRC at 10:35 on 11/22/11.